

# Notice of Allowability

Application No.

09/745,969

Examiner

Jason M Perilla

Applicant(s)

WU ET AL.

Art Unit

2634

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed July 27, 2004.
2. ☒ The allowed claim(s) is/are 1, 4, 6-9, 11-14, and 23, renumbered as claims 1-11.
3. ☒ The drawings filed on 21 December 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20041018</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|   | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Edwin H. Taylor on October 25, 2004.

The application has been amended as follows:

Regarding claim 1, in line 6, replace "representing the relative amplitude of samples" with --representing relative amplitudes of samples--, in line 8, replace "controlled by a current relative amplitude of one of the samples" with --controlled by a relative amplitude of a current sample --, in line 10, replace "representing the relative amplitude" with --representing a relative amplitude--, in line 11, replace "once the base-band" with --once the digital base-band--, and, in line 14, replace "coupled to the counter for controlling gain" with --coupled to the gain control counter for controlling a gain--.

Regarding claim 6, in line 3, replace "with a lower threshold" with --with a low threshold--.

Regarding claim 7, in line 3, replace "with an upper threshold" with --with a high threshold --.

Regarding claim 8, in line 3, replace "the number of samples" with --a number of samples--.

Regarding claim 11, in line 4, replace "a count up and count down signal" with --a count up signal and a count down signal--.

Regarding claim 12, in line 3, replace "a count up and count down signal" with --a count up signal and a count down signal--.

Regarding claim 13, in line 4, replace "increasing gain" with --increasing the gain--.

Regarding claim 14, in line 3, replace "decreasing gain" with --decreasing the gain--.

Claims 19, 21, and 22 are CANCELED.

Regarding claim 23, in line 7, replace "representing the relative amplitude of" with --representing relative amplitudes of--, in line 8, replace "by a current relative amplitude of sample" with --by a relative amplitude of a current sample--, in line 10, replace "amplitude of a sample" with --amplitude of one of the samples--, and, in line 12, replace "coupled to the counter for controlling gain" with --coupled to the gain control counter for controlling a gain--.

**Claim 4 is renumbered as claim 2. Claim 23 is renumbered as claim 3, and the dependency of claim 6 is amended such that the claim is dependent upon claim 3. Claims 6-9, and 11-14 are renumbered as claims 4-11, respectively, and the claim dependency is amended accordingly.**

***Allowable Subject Matter***

2. Claims 1, 4, 6-9, 11-14, and 23 renumbered as claims 1-11 are allowed.
3. The following is an examiner's statement of reasons for allowance:

The claims are allowable over the prior art of record because the prior art of record does not anticipate or obviate the limitations of independent claims 1 and 23 (renumbered as claims 1 and 3). In particular, the prior art of record does not disclose a counter controlled partially by an output of a shift register representing a relative amplitude of one sample taken earlier in time. The registers of Hamlin et al (fig. 2, ref. 29) do provide an output to a comparator, but they do not provide an output of one sample taken earlier in time. Rather, the register provides a hysteresis (col. 7, line 60 – col. 8, line 37) not a history.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2634

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



Jason M. Perilla  
October 18, 2004

jmp



CHIEH M. FAN  
PRIMARY EXAMINER